

Claims 1 to 13 and 18 to 20 distinguish over the Schreuder patent. The present claims relate to topical application of a PPAR stabilizer (claims 1, 4 to 11), such as perilla oil and perilla seed oil (claims 2 to 3 and 12 to 13). The Schreuder patent discloses topical application of esters of higher natural fatty acids or alcohols. The Schreuder patent further discloses perilla seed oil as an example of a natural product from which higher natural fatty acids or alcohols may be derived. Thus, it is submitted that the fatty acids or alcohols of the Schreuder patent must be derived from the natural source and subsequently esterified prior to inclusion with paraffinic oils in the disclosed composition (see col. 1, lines 37 - 47). It is further submitted that the fatty acids or alcohols derived from natural sources have been materially chemically altered. Clearly, the Schreuder patent fails to disclose topical application of a PPAR stabilizer, such as perilla oil or perilla seed oil, as in the present method.

Claims 6 to 9 further distinguish over the Schreuder patent. The claims relate to topical application of a PPAR stabilizer to treat or ameliorate the conditions of oily skin (claim 6), oily hair or oily scalp (claim 7), blemishes (claim 8) and skin break out (claim 9). The Schreuder patent discloses skin disorders such as cellulitis or striae (column 1, lines 8 to 14). The Shreuder patent does not specify treatment or amelioration of any of the conditions set forth in claim 6 to 9. Thus, claims 6 to 9 clearly are patentable over the disclosure of the Shreuder patent.

Claims 1 to 13 and 18 to 20 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,882,664 to Soma et al. The Soma et al. patent was described as disclosing a composition for topical application that has an

extract from a plant of the family Labiatae, such as the genus *Perilla*, for enhancing hyaluronic acid productivity. Decrease in such productivity was described as being linked to dermal aging. The composition was further described as containing 0.0001 to 20% by weight of the extract.

Claims 1 to 13 and 18 to 20 distinguish over the Soma et al. patent because *perilla* oil is materially different than the plant extracts of the *Perilla* genus disclosed in the patent. Claims 1 to 13 and 18 to 20 relate to topical application of a PPAR stabilizer (claims 1, 4 to 11) such as *perilla* oil (claims 2 to 3 and 18 to 20). *Perilla* oil is hydrophobic oil. The plant extracts disclosed in the Soma et al. patent are mixtures substantially of solvent with only a portion of the plant components present (see Yields for Preparation Example 10 to 14 in Table 1). Thus, the Soma et al. patent does not disclose the topical application of *perilla* oil. For the plant extracts of the *Perilla* genus in Preparation Examples 10 through 14, disclosed extraction yields were only 17.9 to 25.5 %. Thus, significant portions of the plant components were not present. Further, Preparation Examples 10-14 used blends of polar solvents (ethanol/water), wherein the *perilla* oil used in the claimed invention is a hydrophobic oil. Similarly, the other disclosed plant extracts of the *Perilla* genus, Formulation Examples 2, 7 and 10, all had substantially aqueous solvent systems. Given that the form of the *perilla* oil and the disclosed plant extracts are substantially different, it is submitted that the Soma et al. patent does not disclose the application of a PPAR stabilizer such as *perilla* oil to the skin. Further in view of the substantially different physical forms of the *perilla* oil and the disclosed plant extracts of the genus *Perilla* in the Soma et al. patent, the patent cannot be said to disclose the 0.01 wt% to 10 wt% range of the PPAR stabilizer in claim 10.

Claims 1 to 13 further distinguish over the Soma et al. patent. Claims 1 to 13 require the topical application of a PPAR stabilizer. The Soma et al. patent fails to disclose PPAR stabilization let alone suggest that enhancing hyaluronic acid productivity has any stabilizing effect on PPAR receptors. Moreover, claims 4 to 13 require the treatment or amelioration of conditions such as cellulite, oily skin, oily hair, oily scalp, blemishes or skin break out. The Soma et al. patent does not disclose any of the aforementioned conditions or any relationship between enhancing hyaluronic acid productivity and those conditions. Thus, the Soma et al. patent cannot be said to anticipate any of claims 1 to 13.

Claims 18 to 19 further distinguish over the Soma et al. patent. Claims 18 to 19 require the topical application of perilla oil to treat or ameliorate conditions such as cellulite, oily skin, oily hair, oily scalp, blemishes or skin break out. The Soma et al. patent does not disclose any of the aforementioned conditions or any relationship between enhancing hyaluronic acid productivity and those conditions. Thus, the Soma et al. patent cannot be said to anticipate either claims 18 or 19.

Claim 20 further distinguishes over the Soma et al. patent. Claim 20 requires treatment of delineated conditions resulting from or accompanied by PPAR upregulation. The Soma et al. patent fails to disclose PPAR upregulation or suggest that enhancing hyaluronic acid productivity has any effect on PPAR upregulation. Moreover, the patent does not disclose any of the delineated conditions of cellulite, oily skin, oily hair, oily scalp, blemishes and skin break out, let alone disclose any relationship between enhancing hyaluronic acid productivity and those

conditions. Thus, the Soma et al. patent cannot be said to anticipate claim 20.

Claims 1 through 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over the Soma et al. patent in view of U.S. Patent No. 4,560,555 to Snider. The Snider patent was described as disclosing reactive polymers for the treatment disorders. Component A of the polymer was described as obtainable from a natural oil.

Claims 1 through 20 distinguish over the combination of the teachings of the Soma et al. patent and the Snider patent for the reasons stated above in the 102(e) rejection above and further because the Snider patent does not disclose or suggest the topical application of perilla oil or fish oil. By the time the disclosed composition is topically applied, the natural oil, which may be perilla oil, fish oil or one of numerous others, has been altered chemically to a material degree. Thus, combination of the teachings of the two cited patents does not yield the present invention.

It is submitted that the chemically processed natural oil of the Snider patent is not a natural oil at all. The Snider patent discloses reactive polymers for the treatment of skin afflictions. These reactive polymers, component A and component B, must be mixed at the time of use (i.e., just before application to the skin) because, upon such mixing and after application to the skin, the reactive polymers cross-link with skin proteins. Component A may be derived from a natural oil, such as fish oil or perilla oil (col. 4, lines 4 - 11). However, the natural oil must be "pre-reacted with polyvalent alcohols with consequent formation of hydroxylated glycerid (sic)
successively reacted with carboxylic acids" (emphasis added) (col.

4, lines 4-7) to produce component A. Component A is actually a prepolymer, which must be an oligomer having hydroxylic, amidic or aminic chemical functions (col. 2, lines 54-55) in order to react with component B when mixed. This required modification of natural oils to provide the prepolymer component A is illustrated in the examples (see col. 4, line 55 through col. 6, line 61, specifically examples 4, 6, 7 and 10 where soya-bean oil, fish oil and castor oil are reacted to form prepolymers).

Given that component A of the Snider patent is not a natural oil and that none of the disclosed natural oils are actually topically applied, it would not be obvious to modify the composition and method of treatment disclosed in the Soma et al. patent with the perilla oil and dish oil purportedly disclosed in the Snider patent.

As in applicant's remarks above pertaining to the 102(b) and 102(e) rejections above, the present claims further distinguish over the combination of the teachings of the Soma et al. and Snider patents. Claims 1 to 13 require the topical application of a PPAR stabilizer. Neither of the patents nor their combination discloses PPAR stabilizers. Claims 6 to 8 require treatment or amelioration of the conditions of oily skin (claim 6), oily hair or oily scalp (claim 7), and blemishes (claim 8). Neither of the patents nor their combination disclose treatment or amelioration of such conditions. Claims 14 to 15 require certain proportions of alpha-linolenic acid and eicosapentaenoic acid. Neither of the patents nor their combination disclose such acids or such proportions.

Reconsideration of claims 1 to 20 is deemed warranted in view of the foregoing, and allowance is respectfully requested.

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Respectfully submitted,



Charles N.J. Ruggiero
Reg. No. 28,468
Attorney for Applicant
Ohlandt, Greeley, Ruggiero
& Perle, L.L.P.
One Landmark Square
Stamford, CT 06901-2682
Tel: 203-327-4500